

Claim Listing and Amendments

Claims 1-81 (Canceled)

82. (New) A gas humidification apparatus comprising:

an inlet;

a humidification device in fluid communication with said inlet, said humidification device comprising:

a humidification material that readily absorbs moisture and readily release moisture when exposed to a dry environment, wherein said humidification material is placed within a shell that is not made of a material that readily absorbs moisture and readily release moisture when exposed to a dry environment and has a configuration that generates turbulence in a gas as it passes over a surface of said shell; and
an outlet in fluid communication with said humidification device.

83. (New) A gas humidification apparatus comprising:

an inlet;

a humidification device in fluid communication with said inlet, said humidification device comprising:

a heater housing comprising a heater and a plurality of openings;

a humidification material that surrounds said heater, readily absorbs moisture and readily releases moisture when exposed to a dry environment, wherein said humidification device further comprises a second humidification material that is spaced from said humidification

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material and readily absorbs moisture and readily releases moisture when exposed to a dry environment; and

an outlet in fluid communication with said humidification device.

84. (New) A gas apparatus comprising:

an inlet;

a heater in fluid communication with said inlet,

a temperature sensor for measuring a temperature of a gas that flows within said gas apparatus in an indirect manner; and

a humidification material that readily absorbs moisture and readily releases moisture when exposed to a dry environment, wherein said humidification material has a configuration that generates turbulence for a gas that should pass over a surface of said humidification material.

85. (New) A gas humidification apparatus comprising:

an inlet;

a humidification device in fluid communication with said inlet, said humidification device comprising:

an integral humidification material that is unbundled to any other humidification material and readily absorbs moisture and readily release moisture when exposed to a dry environment, wherein said humidification material has a configuration that generates turbulence in a gas as it passes over a surface of said humidification material;

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a heater that generates heat via electricity, wherein said humidification device envelops said heater; and

an outlet in fluid communication with said humidification device, wherein said humidification material is a unitary structure and is the sole humidification material of said gas humidification apparatus.

86. (New) A gas humidification apparatus comprising:

inlet means for supplying a gas;

turbulence means for generating turbulence in said gas;

outlet means for expelling said turbulent gas from said humidification apparatus; and

a humidification material that is a unitary structure and is the sole humidification material of said gas humidification apparatus.

87. (New) A gas apparatus comprising:

an inlet;

a heater in fluid communication with said inlet;

a temperature sensor for measuring a temperature of a non-ambient gas that flows within said gas apparatus in an indirect manner;

a humidification material that readily absorbs moisture and readily releases moisture when exposed to a dry environment, wherein said humidification material is a unitary structure and is the sole humidification material of said gas apparatus;

a second inlet that transfers a fluid to said humidification material; and

wherein said inlet transfers said gas to said humidification material.